

DETAILED ACTION

Status of Claims

Claims 1, 3-9, 11-18 are examined. Claims 2 and 10 are canceled; Claim 18 is new;
Claims 1, 3-9, 11-17 are amended.

Examiner's note: Examiner has pointed out particular references contained in the prior art of record in the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the **entire** reference as potentially teaching all or part of the claimed invention, as well as the content of the passage as taught by the prior art or disclosed by the Examiner.

Claim Rejections - 35 USC § 112

Claims 1, 3-9, 11-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- The independent claims mention customer activities across multiple channels upon which promotions are targeted and delivered, however it is unclear how a one-way channel such as a catalog or direct marketing can be used in this way.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 6-7, 9, 12-17, rejected under 35 U.S.C. 102(b) as being anticipated by Katz et al., (6055513).

As per Claim 1

Katz et al ('513) discloses:

A method for targeting customers comprising the steps of:

- receiving a customer request on a channel; (Col 8, lines 46-53; Col 9, lines 41-42)
- forming an integrated belief profile for said requesting customer for a set of channel types; (Col 10, lines 46-63; Col 11, lines 32-45)
- executing said request to give a response; (Col 8, lines 53-54)
- generating a promotion on the basis of said integrated belief profile; and (Col 8, lines 57-61)
- providing said response and said promotion to said requesting customer. (Col 8, 61-62)

Katz discloses One or more databases may be accessed, either in parallel or series, to collect and assemble input information for the system to determine the upsell or intelligent product selection. [**generating a promotion**] (Col 9, lines 2-3); ..another class of database information may include third party databases relating to items **believed** to be possessed by or desired by the customer, (Col 10, lines 34-36); example, an upsell is more likely to sell to a 'night owl' will be offered as opposed to what is believed to effectively sell to a 'morning person'. (Col 11, lines 17-20); a database which maintains what it **believes** to be an accurate count of items (Col 23, lines 51-54); It is an object of this invention to provide methods and apparatus to increase the probability and profitability of commercial transactions. (Col 12, lines 51-53); The mode of presentation

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may be varied based on demographic information (Col 12, lines 35-36); offers are made across modes of communication [channels](Col 11, lines 32-45). Modes are defined as e-mail, facsimile, independent phone contact, cable contact, etc.[**multiple channels**]; The data may then be utilized in subsequent transactions, such as by storing the information in memory, or by utilizing it in connection with the determining unit.(Col 18, lines 35-39); Data related to a customer may be actual or estimated [belief] or may be associated with a code or designator which indicates others of a expected or suspected set of interests or reactions[befief] (Col 23, lines 6-21).

As per Claim 4

Katz et al ('513) discloses:

The method of claim 1, wherein said promotion is generated according to a set of predetermined rules. (Col 9, lines 1-5) Katz et al refers to determining means for generating promotions or upsells.

As per Claim 6

Katz et al ('513) discloses:

The method of claim 1, further comprising the step of identifying the channel upon which the request is made, and wherein said response and said promotion is provided on said identified channel type. (Col 26, lines 38-48) Offers are made via website, live operator, telemarketer)

As per Claim 7

Katz et al ('513) discloses:

The method of claim 1, wherein said receiving step further includes converting a format of the requesting channel to a common format, and wherein said providing step back-converts said response and said promotion to the format of the customer request. (Col 11, lines 46-55) The presentation of the data is based in part upon the communication between the user and the system; In the offering mode of the website, one variation may include the ability to transfer from the website to a live operator. (Col 26, lines 38-40).

As per Claim 9

Katz et al ('513) discloses:

A data processing system for targeting customers comprising:

- an interface for receiving a customer request on a channel; (Col 31, lines 40-44)
- a data processor for forming an integrated belief profile for said requesting customer for a set of channel types, executing said request to give a response, and generating a promotion on the basis of said integrated belief profile; and (Col 31, lines 53-59)
- wherein said interface provides said response and said promotion to said requesting customer. (Col 31, lines 60-63)

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Katz discloses Various proffer [promotion] selection methodologies including ...**profile** or other inputs. (Col 10, lines 48-53); Determining characteristics of the user based at least in part upon the communication between the user of the system and the electronic system, third, determining the mode of presentation for the user based at least in part on the determined characteristics of the user, and fourth, presenting the information to the user in the determined mode. [**request on a channel**] (Col 11, lines 50-55); the upsell system typically includes a determining or type analysis system or unit which serves to receive the various inputs for the determining unit and to generate output relating to possible upsells for the customer.(Col 16, lines 64-67); the upsell system includes a control and upsell generator system, such as implemented through a special purpose computer or a general purpose program or otherwise adapted to achieve the functionalities described herein. The program may be implemented in a linear programmed fashion, or may use other decisional bases, such as expert systems, fuzzy logic, neural networks, adaptive systems or other decisional systems known to the art, and which effectuate the desired functionalities of the inventions. (Col 20, lines 23-32); the mode of manner of the offer to the customer may also be varied. (Col 25, lines 40-41; See Fig. 3)

As per claim 12

Katz et al. ('513) discloses:

The data processing system of claim 11, wherein said processor generates said promotion according to a set of predetermined rules stored in a memory. (Col 31, lines

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53-59; Col 33, lines 28-31); The system may be modified over time. For example, the success of prior upsells of specific items may be further incorporated in the decision as to the upsell offers. This modification of the rules over time may be either done in real time, or on a periodic basis, such as in a batch mode. (Col 26, lines 4-8).

As per claim 13

Katz et al. ('513) discloses:

The data processing system of claim 10, wherein said processor generates a promotion also based on said customer beliefs for the respective channel. A system to identify a good or service for possible proffer and upsell to the customer based at least in part upon the primary transaction data information provided to the system, ... utilizing a [channel] of communication...obtaining at least a second data element relating to the user for the upsell determination, ...offering the item to the prospective customer (Col 8, lines 42-45, 49-50, 56-62; Col 33, lines 21-27)

As per claim 14

Katz et al. ('513) discloses:

The data processing system of claim 9, wherein said processor further identifies the channel upon which the request is made, and wherein said response and said promotion is provided by said interface on said identified channel type. (Fig. 6; Col 32, lines 23-25, 30-32)

As per claim 15

Katz et al. ('513) discloses:

The data processing system of claim 9, wherein said interface converts format of the requesting channel to a common format, and back-converts said response and said promotion to the format of the customer request. (Col 33, lines 56-57)

As per claim 16

Katz et al. ('513) discloses:

The data processing system of claim 9, further comprising a memory for accumulating said set of beliefs for customers over multiple user sessions such that said integrated belief profile is incrementally updated. The results of the proffer response thereto may be utilized in the modification or updating of the system to identify later upsells. (Col 11, lines 43-45; Col 34, lines 10-12)

As per Claim 17

Katz et al. ('513) discloses:

A computer program product for targeting customers, comprising a computer program held on a storage medium, the computer program including:

- a code element for receiving a customer request on a channel; (Col 20, lines 54-58)
- a code element for forming an integrated belief profile for said requesting customer for a set of channel types; (Col 20, lines 27-32)

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- a code element for executing said request to give a response; (Col 20 lines 59-62)
- a code element for generating a promotion on the basis of said integrated belief profile; and (Col 20, lines 27-32)
- a code element for providing said response and said promotion to said requesting customer.(Col 21, lines 1-9)

Examiner interprets data indication in reference as code elements for above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5, 8, 11, 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Katz et al. (6055513), and further in view of Reiser et al. (6125339).

Claims 1, 3, 5, 8, 11, 18: Katz (Col 20, lines 23-62) discloses an upsell method, system, apparatus and program which allows for decisional processes using linear programming, expert systems, fuzzy logic, neural networks, adaptive systems and other decisional systems known in the art. Further, these processes use data from multiple databases including chronological data, demographics, profile, identification, credit, inventory, billing, telemarketing, history, marketing and campaign data. Katz does not explicitly mention Dempster Orthogonal Sum belief processes, however, this approach is a basic probability assignment process which is covered by the Katz description. Reiser (Col 2, lines 6-23) teaches the Dempster-Schafer belief process,- a method of fuzzy logic for automatically learning belief functions "including the steps of gathering information representative of an object or event; creating a set of basic probability assignments based on said set of information; creating combinations of said basic probability assignments; measuring an error present in said basic probability

assignments and said combinations of basic probability assignments; calculating updates of said basic probability assignments and said combinations of basic probability assignments based on said error; and modifying said basic probability assignments and said combinations of basic probability assignments with said updates.” The Katz invention allows for the Reiser invention to be a part of the Katz invention. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Katz to use the Dempster-Shafer basic probability assignment method in order to better predict the accuracy of a customer accepting a promotion and selecting the appropriate promotion for that to happen.

As per Claim 3

Reiser et al. ('339) teaches:

The method wherein a normalized Dempster Orthogonal Sum of said set of beliefs is formed to give said integrated belief profile. (Col 4, lines 51-67) Reiser forms belief targets based on information from different sources. The Katz invention allows for the Reiser invention to be a part of the Katz invention. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Katz to use the Dempster-Shafer basic probability assignment method in order to better predict the accuracy of a customer accepting a promotion and selecting the appropriate promotion for that to happen.

As per Claim 5

Reiser et al. ('339) teaches:

The method wherein the step of generating a promotion is also based on said customer beliefs for the respective channel. (Col 4, lines 51-67) Reiser forms belief targets based on information from different sources. The Katz invention allows for the Reiser invention to be a part of the Katz invention. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Katz to use the Dempster-Shafer basic probability assignment method in order to better predict the accuracy of a customer accepting a promotion and selecting the appropriate promotion for that to happen.

As per Claim 8

Katz et al. ('513) discloses

Reiser et al. ('339) teaches:

The method of claim 1, comprising the further step of accumulating said set of beliefs for customers over multiple user sessions such that said integrated belief profile is incrementally updated. (Katz Col 25, lines 40-44); The system may be modified over time. For example, the success of prior upsells of specific items may be further incorporated in the decision as to the upsell offers. This modification of the rules over time may be either done in real time, or on a periodic basis, such as in a batch mode. (Col 26, lines 4-8) ; (Reiser Col 2, lines 18-22) The Katz invention allows for the Reiser invention to be a part of the Katz invention. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of

Katz to use the Dempster-Shafer basic probability assignment method in order to better predict the accuracy of a customer accepting a promotion and selecting the appropriate promotion for that to happen.

As per Claim 11

Reiser et al. ('339) teaches:

The data processing system of claim 10, wherein said processor calculates a normalized Dempster Orthogonal Sum of said set of beliefs to give said integrated belief profile. (Col 5, lines 27-52; Col 6, lines 1-16) The apparatus generates beliefs of target. The Katz invention allows for the Reiser invention to be a part of the Katz invention. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Katz to use the Dempster-Shafer basic probability assignment method in order to better predict the accuracy of a customer accepting a promotion and selecting the appropriate promotion for that to happen.

Response to Arguments

Applicant's arguments filed March 5, 2008 have been fully considered but they are not persuasive. Applicant cites 'multiple channels **including any of a** store, a telephone, a catalog, an on-line personal computer, and direct marketing'. Reference cites modes of communication including **personal computer, telephone**, email, facsimile, cable contact, etc. which are considered in meeting customer request and making promotional offers. Promotional offers to customer in the reference are based

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on a first data element based on the requested transaction and at least a second data element from a second and remote database which may be comprised of demographic information, interests, beliefs, history etc. Katz allows for expert systems, fuzzy logic, neural networks, adaptive systems, or other decisional systems known to the art, and which effectuate the desired functionalities of the invention. Reiser teaches the Dempster-Schafer belief process,- a method of fuzzy logic for automatically learning belief functions “including the steps of gathering information representative of an object or event; creating a set of basic probability assignments based on said set of information; creating combinations of said basic probability assignments; measuring an error present in said basic probability assignments and said combinations of basic probability assignments; calculating updates of said basic probability assignments and said combinations of basic probability assignments based on said error; and modifying said basic probability assignments and said combinations of basic probability assignments with said updates.”

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Basak et al. (2006/0143079) discloses across-channel customer matching
- b. Mahler (5748852) discloses a Dempster-Shafer matching process
- c. Kang et al. (6338051) discloses a fuzzy logic method for matching music to customer preferences.
- d. Horowitz et al. (6349290) discloses an automated method for presenting products and inducement to financial customers using multiple variables.
- e. Brewer et al. (6886037) discloses a channel director for cross channel customer interactions
- f. Elderling (7062510) discloses a consumer profiling and advertisement selection system
- g. Bernstein (2002/0107730) discloses a method and apparatus for identifying customers delivery of promotional materials.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colleen Hoar whose telephone number is (571)270-3447. The examiner can normally be reached on Monday- Thursday 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on 571-272-6724. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffrey D. Carlson/

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/C. H./6/30/2008